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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/662,125

Filing Date: September 12, 2003

Appellant(s): MOSER ET AL.

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Elena B. Dreszner  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed December 29, 2008 appealing from the  
Office action mailed July 23, 2008.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

Appeal pending with respect to patent application no. 10/365,672.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

A substantially correct copy of appealed claims appears on page 26 of the Appendix to the appellant's brief. The minor errors are as follows: Claim 1, line 1 should recite, "A computer system..."

**(8) Evidence Relied Upon**

6,236,997	BODAMER ET AL	5-2001
6,226,650	MAHAJAN ET AL.	5-2001

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
2. Claims 1-6, 8-11, 16, 19-23, 27-34, 40-42, 44-48, and 50 rejected under 35 U.S.C. 102(b) as being anticipated by Bodamer et al (US Pat. 6,236,997), hereafter "Bodamer."

3. As to claim 1, Bodamer discloses a computer system, comprising:
  - a master data server, to maintain a master database storing master data objects (Fig. 3A, labels 208 (master data server) and 308 (master database)), the master data server using master identifiers to identify the master data objects, the master database being accessible to clients (column 4, lines 60-65); and
    - an integration server (column 5, lines 22-26), in response to a request from a client to access master data identified by a client identifier, to map the client identifier to a master identifier, retrieve a master data object from the master database based on the master identifier, and map the master data object to a mapped data object based on a set of mapping rules associated with the client (column 7, lines 9-15, modules map database operations to a target foreign process; column 8, lines 28-46, gives an illustrative example).
4. As to claim 19, Bodamer discloses a system, comprising:
  - a master data server, to maintain a master database storing master data objects (Fig. 3A, labels 208 (master data server) and 308 (master database)), each object having a set of attributes (column 8, lines 9-17), the master database being accessible to clients, each client processing a subset of attributes of the master data objects (column 4, lines 60-65); and

an integration server (column 5, lines 22-26), in response to a request from any one of the clients to access a master data object, to retrieve the master data object from the master database and map the master data object to a mapped data object based on a set of mapping rules associated with the client so that the mapped data object contains the subset of attributes in a format that can be processed by the client (column 7, lines 9-15, modules map database operations to a target foreign process; column 8, lines 28-46, gives an illustrative example).

5. As to claim 20, Bodamer discloses a method, comprising:

maintaining a master database at a data server, the master database containing master data objects, the master database accessible to clients (Fig. 3A, labels 208 (master data server) and 308 (master database), and column 4, lines 60-65);

receiving a request from a client to access master data, the request containing a client identifier (column 7, lines 9-17 and column 8, lines 28-32);

mapping the client identifier to a master identifier (column 7, lines 9-17 and column 8, lines 32-46);

retrieving a master data object based on the master identifier (column 7, lines 9-17 and column 8, lines 32-46);

mapping the master data object to a mapped data object based on a set of mapping rules associated with the client (column 8, lines 32-46); and

sending the mapped data object to the client (column 8, lines 41-46).

6. As to claim 28, Bodamer discloses a method for maintaining data comprising:
  - providing a master database having master data shared by at least two clients (Fig. 3A, and 308 (master database), and column 4, lines 60-65);
  - providing an interface for updating the master database (column 5, lines 22-26);
  - providing an interface for mapping subsets of the master data into mapped data having a format that is acceptable to each client (column 8, lines 9-21); and
  - providing a user interface for entering and displaying subsets of the master data (column 4, lines 19-23).
7. As to claim 44, Bodamer discloses a computer program product, tangibly stored on a machine-readable medium, for dynamic access of master data, comprising instructions operable to cause a programmable processor to:
  - associate master data with an object (column 5, lines 1-7, client updates a foreign database, i.e. an update is master data, the object any data the update contains);
  - send the master data to a master data server that stores master data associated with the object on a database (column 4, line 60-column 5, line 7, client updates a foreign database controlled by a foreign sever (master data server)); and

access master data associated with objects on the database by requesting that an integration server that communicates with the programmable processor and the master data server (column 4, line 60-column 5, line 7, and column 5, lines 22-26) map the data in the data server to a mapped data set that has a format conforming to rules defined by the programmable processor and send the mapped data set to the programmable processor (column 7, lines 9-15, modules map database operations to a target foreign process; column 8, lines 28-46, gives an illustrative example).

8. As to claim 19, they are rejected by the same rationale set forth in claim 1's rejection.
9. As to claim 40, it is rejected by the same rationale set forth in claim 20's rejection.
10. As to claim 41, it is rejected by the same rationale set forth in claim 28's rejection.
11. As to claim 42, it is rejected by the same rationale set forth in claim 35's rejection.

12. As to claim 2, Bodamer discloses at least two clients use different client identifiers to identify a common master data object (column 8, lines 1-9 and column 5, lines 22-27).
13. As to claim 3, Bodamer discloses a mapping table to store information related to the mapping of the client identifiers to the master identifiers (column 8, lines 1-9).
14. As to claim 4, Bodamer discloses mapping table to store mapping rules associated with the clients (column 8, lines 1-9).
15. As to claims 5 and 27, Bodamer discloses the master data object has a plurality of attributes associated with characteristics of an entity represented by the master data object (column 8, lines 1-9), and mapping the master data object to the mapped data object comprises retrieving a subset of the attributes from the master data object and formatting the subset of attributes based on rules defined by the client (column 7, lines 9-15, modules map database operations to a target foreign process; column 8, lines 28-46, gives an illustrative example).
16. As to claims 6 and 33, Bodamer discloses the integration server dynamically maps the master data object in the master database to the mapped data object based on mapping rules defined by the client each time the client requests for the

master data (column 7, lines 9-15) without replicating the master data object at a database local to the client (column 5, lines 1-7).

17. As to claims 8, 29, and 46, Bodamer discloses the integration server comprises an exchange interface receives data that are published by a first client, and routes the published data to a second client that requested the published data (column 5, lines 1-4, client updates foreign database, that database is available to other clients).

18. As to claim 9, Bodamer discloses the integration server maps the data published by the first client to master data based on a first set of mapping rules associated with the first client (column 5, lines 1-4, client updates data utilizing conversion module as discloses in column 8, lines 1-9), and maps the master data to mapped data that can be processed by the second client based on a second set of mapping rules associated with the second client (column 8, lines 1-9).

19. As to claims 10, 30, 32, and 47, Bodamer discloses the integration server comprises a content integrator that finds characteristics that at least two clients associate with an object (column 8, lines 1-9 and column 8, lines 28-46).

20. As to claims 11 and 48, Bodamer discloses the integration server comprises an adapter that receives communications from a client and extracts master data

from the communications and forwards the extracted master data to the master data server (column 4, lines 60-65).

21. As to claim 16, Bodamer discloses the master data server provides processes to allow the clients to modify the master data (column 4, lines 50-56).

22. As to claim 21, Bodamer discloses receiving a request from the client to modify the master data object to create a modified master data object, and querying the other clients to verify that the modified master data object conforms to consistency rules defined by the other clients (column 8, lines 1-9 and column 8, lines 28-46).

23. As to claim 22, Bodamer discloses if a particular client does not respond to the query as to whether the modified master data object conforms to consistency rules defined by the particular client, placing the particular client on an exception list to indicate that the modified master data object has not been verified to conform with the set of consistency rules defined by the particular client (column 8, lines 1-9 and column 8, lines 28-46).

24. As to claim 23, Bodamer discloses after a predefined period of time or when the particular client attempts to access data in the database, performing another attempt to verify whether the modified master data object conforms to the

consistency rules defined by the particular client (column 8, lines 1-9 and column 8, lines 28-46)..

25. As to claim 31, Bodamer discloses receiving updates of the characteristics for an object from either one of the first and second clients, and sending the updates to the other of the first and second clients (column 8, lines 1-9 and column 8, lines 28-46).

26. As to claim 34, Bodamer discloses receiving updates of the characteristics for an object from either one of the first and second clients, and sending the updates to the other of the first and second clients (column 8, lines 1-9 and column 8, lines 28-46)..

27. As to claim 45, Bodamer discloses the integration server communicates with the programmable processor and the master data server dynamically (column 4, lines 42-59).

28. As to claim 50, Bodamer discloses the programmable processor can modify the master data stored in the master data server (column 4, line 60-65).

29. Claims 39 rejected under 35 U.S.C. 102(b) as being anticipated by Mahajan et al (US Pat. 6,226,650), hereafter "Mahajan."

30. As to claim 39, Mahajan discloses a method comprising:

receiving a first set of communications from a first client (column 4, lines 9-14);

analyzing the first set of communications to find a set of characteristics that the first client associates with a data object used in the first set of communications (column 4, lines 15-23);

analyzing other communications received from clients to find additional sets of characteristics that clients associate with data objects that have the same characteristics as the first set of characteristics (column 4, lines 15-23);

placing the first client and clients who sent a set of characteristics that are the same as the first set of characteristics into a client group (column 4, lines 15-23, clients with the same data requirements will be in the same group in the sense they will have access to the exact same file groups); and

generating a data distribution path to allow updates of the set of characteristics to be sent to the client group (column 4, lines 26-29, server updates file groups, appropriate updates are distributed to their respective clients).

***Claim Rejections - 35 USC § 103***

31. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

32. Claims 7, 12-15, 17-18, 24-26, 35-38, and 49 are rejected under 35 U.S.C.

103(a) as being unpatentable over Bodamer in view of what was well known in the art at the time of the invention.

33. As to claim 35, Bodamer discloses a method for maintaining data, comprising:

receiving a first identifier used by a first client to identify a data object, and a request to delete the data object, the data object being stored in a database maintained by a data server, the database being accessible to the first client and a second client (column 4, line 60-column 5, line 7, various database operations can be performed by client, further varying types of clients exists in the system as discloses in column 7, lines 10-17);

mapping the first identifier to a second identifier used by the second client to identify the data object (column 5, lines 22-27, a client is able to manipulate data on a non-native database server, i.e. varying types of clients can access the foreign data);

mapping the first identifier to a third identifier used by the data server to identify the data object (column 5, lines 22-27, the non-native database has its own command and file structure to manipulate the data).

But, Bodamer does not disclose querying the second client based on the second identifier to determine whether the second client is using the data object and if the second client is not using the data object, deleting the data object from the database based on the third identifier.

However, preventing the deletion of in use item by a first client when a second client is using the item was a well known and expected practice in the art at the time of the invention. Therefore, Official Notice is taken (see MPEP 2144.03 Reliance on "Well Known" Prior Art) that one of ordinary skill in the art would view it as obvious to query an object to see if it is use by another client before deletion of that item in order to prevent errors occurring due to missing data.

34. As to claim 24, it is rejected by the same rationale set forth in claim 35's rejection.

35. As to claims 7 and 25, Bodamer does not explicitly disclose the integration server comprises a cache to store master data objects that are requested by clients, and to provide stored master data objects to clients when the integration server receives requests that are identical to previous requests for access to the master data objects. However, the use of caches was a well known and expected practice in the art at the time of the invention in order to reduce the time required

to fetch data. Therefore, Official Notice is taken (see MPEP 2144.03 Reliance on "Well Known" Prior Art) that one of ordinary skill in the art at the time of the invention would view it as an obvious modification to include a cache in Bodamer's system in order to reduce the time required to fetch data when an object receives multiple requests.

36. As to claims 12-15, 26, and 49, Bodamer does not disclose client authorization checks being performed at the master data server or the client. However, authorization being preformed before data access or data modification was a well known and expected practice in the art at the time of the invention. Therefore, Official Notice is taken (see MPEP 2144.03 Reliance on "Well Known" Prior Art) that one of ordinary skill in the art at the time of the invention would view it as an obvious modification to include known client authorization practices in order to maintain the security of the database system and prevent unauthorized access and modification of data.

37. As to claim 17-18, Bodamer discloses a portion of the master data objects are associated with products or business partners. However, databases storing information related to products or business partners was a known use for databases to one of ordinary skill in the art at the time of the invention. Therefore, Official Notice is taken (see MPEP 2144.03 Reliance on "Well Known" Prior Art) that one of ordinary skill in the art at the time of the invention would

view it as an obvious modification use Bodamer's databases to store data relating to products and business partners, as that would make the system useful to a broad range of businesses.

38. As to claim 36-37, determining whether there is any reference to the data object in processes running on the second client and whether there is any reference to the data object in data buffers of the second client and querying the second client to determine whether the second client objects to deletion of the data object, and preventing deletion of the data object if the second client objects are well known and expected practices in the art at the time of the invention. Therefore, Official Notice is taken (see MPEP 2144.03 Reliance on "Well Known" Prior Art) that one of ordinary skill in the art would view it as obvious to query an object to see if it is used by another client before deletion of that item in order to prevent errors occurring due to missing data.

39. As to claim 38, Bodamer does not explicitly disclose the data object has a plurality of attributes, the first client configured to access a first subset of the attributes, the second client configured to access a second subset of the attributes, the second subset being different from the first subset. However, one of ordinary skill in the art would view it as obvious to include data segregation among objects, i.e. prevent one client from accessing another client's relevant data. Therefore, Official Notice is taken (see MPEP 2144.03 Reliance on "Well

Known" Prior Art) that one of ordinary skill in the art would view it as obvious to use a known practice to ensure only clients have access to only the data they need.

**(10) Response to Argument**

The examiner summarizes the various points raised by the appellant and addresses replies individually.

(1) The appellant argues that the 35 U.S.C. 102(b) rejections of claims 1, 19, 29, 28, 35, 40-42, and 44 as being anticipated by Bodamer (US Pat. 6,236,997) are improper. The appellant contends Bodamer does not disclose an integration server operable to respond to a request to access master data identified by a client identifier by retrieving a master data object from a master database based on a master identifier, where the master identifier is related to the client identifier through a mapping of the client identifier to the master identifier.

In reply to **argument (1)**, the examiner disagrees and contends the appellant is taking a narrow view of the claimed invention. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Specifically, the examiner contends Bodamer discloses an integration server (column 5, lines 22-26, "heterogeneous services modules"), operable to:

respond to a request to access master data identified by a client identifier (column 7, lines 9-17 and column 8, lines 28-32; heterogeneous module receives client query identifying "user\_catalog@FDS" (a client identifier)), **by retrieving a master data object from a master database based on a master identifier** (column 8, lines 32-46, data objects are retrieved for the client from the FDS (master database)) **where the master identifier is related to the client identifier through a mapping of the client identifier to the master identifier** (column 8, lines 32-46, if the FDS does not have the table user\_catalog (client identifier), but instead distributed metadata, that metadata is mapped to user\_catalog and the client is given the appearance that the table exists by the structure perceived by the client, i.e. with client identifiers).

Further, the metadata disclosed in Bodamer can be interpreted to include "a master identifier" as metadata is mapped to user\_catalog. Specifically, in the illustrative example disclosed in column 8, lines 47-67, the client statement is converted to a Sybase-compatible query. In the Sybase query, "from user\_catalog@link" from the original query is replaced with "from susers@link SU, sysobjects@link SO" (column 8, line 60). That is, Bodamer explicitly discloses, "This gives the client **[client]** 200 the impression that there actually is a table called 'user\_catalog' **[client identifier]** at the remote server and that it actually does have columns called 'table\_name' and 'table\_type,' when actually the information is extracted from two Sybase data dictionary tables 'sysusers' **[master identifier]** and 'sysobjects'." (Emphasized text added by examiner)

In response to this interpretation, the appellant contends there is no suggestion in Bodamer that the identifier "user-catalog" is mapped to metadata stored in multiple tables by the foreign database system and further that metadata stored in different tables in the foreign data diction at the foreign database system cannot be regarded as "a master identifier" in the context of the claims. (See brief, page 18)

Again, the examiner contends Bodamer explicitly discloses in column 8, lines 32-46, mapping "user-catalog" to metadata ("if the FDS does not have the table 'user-catalog', but rather the metadata is spread across different tables, the client is given the appearance that the data exists...in the structure perceived by the client," i.e. this is the mapping step). Further, in the example disclosed in column 8, lines 47-67 client statements are explicitly converted and the mapping of 'user\_catalog' to 'sysusers' takes place.

(2) The appellant argues that the 35 U.S.C. 102(b) rejections of claims 39 and 43 as being anticipated by Mahajan (US Pat. 6,226,650) are improper. The appellant contends Mahajan fails to disclose placing the first client and clients who sent a set of characteristics that are the same as the first set of characteristics into a client group; or generating a data distribution path to allow updates of the set of characteristics to be sent to the client group; or analyzing the first set of communications to find a set of characteristics that the first client associates with a data object used in the first set of communications as recited in the claims. The appellant specifically contends that

Mahajan's disclosure of assigning a group of data to a client based on data requirements, is distinct from placing two clients in the same group.

In reply to **argument (2)**, the examiner contends Mahajan discloses:

receiving a first set of communications from a first client (column 4, lines 9-14);

analyzing the first set of communications to find a set of characteristics that the first client associates with a data object used in the first set of communications (column 4, lines 15-23, groups are assigned to each client based upon data requirements; Determining data requirements requires analysis, for example see dynamic grouping disclosed in column 6, line 66-column 7, line 2, "the number and make up of the groups depend on constantly changing attribute");

placing the first client and clients who sent a set of characteristics that are the same as the first set of characteristics into a client group (column 4, lines 15-23, if two clients have the same data requirements they will be in the same group in the sense they will have access to the same file groups. That is, when updates are distributed they are distributed to groups of clients and that update group reads on a client group); and

generating a data distribution path to allow updates of the set of characteristics to be sent to the client group (column 4, lines 26-29, server

updates file groups (via a data distribution path, as data is distributed to the clients), appropriate updates are distributed to their respective clients).

In regards to the appellant's specific contention that assigning a group of data to a client based on data requirements, is distinct from placing two clients in the same group, the examiner disagrees and reiterates that if two client's were to have the same data requirements in Mahajan's system, they would subscribe to the same data groups and therefore be in the same functional group of clients.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Thomas J. Dailey

/T. J. D./

Examiner, Art Unit 2452

/John Follansbee/

Supervisory Patent Examiner, Art Unit 2451

Conferees:

/Kenny S Lin/

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